

WHAT IS CLAIMED IS:

1. A baffle plate assembly for a compressor having a housing, a compressing chamber, a motor chamber and an inlet, the baffle plate assembly comprising:

a baffle plate adapted to be attached to the housing of the compressor, adapted to correspond to the inlet of the compressor and having:

a back plate with a bottom and an inner space and adapted to be attached to the housing of the compressor;

a partition wall formed on the back plate to divide the inner space of the back plate into at least one upper guiding channel adapted to communicate with the compressing chamber in the compressor and at least one lower guiding channel adapted to communicate with the motor chamber of the compressor; and

a thermal-conductive element attached to the bottom of the back plate and adapted to be securely attached to the housing of the compressor to make the back plate be moveably attached to the housing of the compressor.

2. The baffle plate assembly as claimed in claim 1, wherein the back plate has a U-shaped cross section to define an inner space in the back plate.

3. The baffle plate assembly as claimed in claim 2, wherein the back plate has two wings respectively extending from two sides of the back plate.

4. The baffle plate assembly as claimed in claim 3, wherein the partition wall is laterally formed between the wings to divide the inner space into one upper guiding channel and one lower guiding channel.

5. The baffle plate assembly as claimed in claim 3, wherein multiple recesses are defined in the back plate at a position corresponding to the at least one upper guiding channel.

1 6. The baffle plate assembly as claimed in claim 2, wherein multiple recesses
2 are defined in the back plate at a position corresponding to the at least one upper guiding
3 channel.

4 7. The baffle plate assembly as claimed in claim 2, wherein the back plate has a
5 cavity defined in the back plate at a position corresponding to the at least one upper
6 guiding channel.

7 8. The baffle plate assembly as claimed in claim 7, wherein multiple recesses
8 are defined in the back plate at a position corresponding to the cavity.

9 9. The baffle plate assembly as claimed in claim 8, wherein the back plate has an
10 inclined section at an area where corresponds to the cavity.

11 10. The baffle plate assembly as claimed in claim 1, wherein multiple recesses
12 are defined in the back plate at a position corresponding to the at least one upper guiding
13 channel.

14 11. The baffle plate assembly as claimed in claim 1, wherein the thermal
15 conductive element comprises two metal plates combined with each other and each
16 having a thermal expansion coefficient different from that of the other.

17 12. The baffle plate assembly as claimed in claim 11 further comprising a
18 sliding device mounted on the back plate to make the back plate be moveably attached
19 to the housing of the compressor.

20 13. The baffle plate assembly as claimed in claim 12, wherein the sliding device
21 comprises:

22 two wings respectively formed on two sides of the back plate;

23 a longitudinal groove defined through each respective wing; and

24 at least one screw penetrating through each respective longitudinal groove and

1 adapted to be screwed into the housing of the compressor.

2 14. The baffle plate assembly as claimed in claim 13, wherein multiple recesses
3 are defined in the back plate at a position corresponding to the at least one upper guiding
4 channel.

5 15. The baffle plate assembly as claimed in claim 12, wherein multiple recesses
6 are defined in the back plate at a position corresponding to the at least one upper guiding
7 channel.